and signal enhancements, in addition to conversion of the Redmond Way/Cleveland Street couplet into two-way streets. Due to these improvements, no significant unavoidable impacts to the transportation system would likely occur by the Year 2022 horizon. In fact, overall system congestion levels would generally improve for the four alternatives compared to No Action Alternative, and similar improvements would likely occur for non-motorized traffic and freight mobility. Although a portion of the parking supply would be eliminated by the Redmond Way conversion to a two-way street, the magnitude of this impact would be considered modest.

Unavoidable impacts would only be realized during construction. These could be mitigated through the measures identified in the previous section. However, some increase in congestion would be unavoidable for all build alternatives during construction.

Public Services and Utilities

Affected Environment

A number of urban services and utilities are provided in or near the proposed project area. A general description of these services and utilities, as identified in Redmond GIS files and the RCP, are discussed in this section. Identification of impacts is based on conceptual design only. Additional coordination with the City Public Works Department and other utility providers will occur during the design phase. As-built plans for utilities will be obtained and consideration of utilities will be incorporated into the design and construction of the project.

Services

Fire

The Redmond Fire Department provides fire and emergency medical services for the City of Redmond. The Department has six stations and a total of 106 employees. The Department also has mutual aid agreements with adjacent jurisdictions. The closest station to the Bear Creek Parkway project area is Station 11, located near the NE 85th Street/161st Avenue NE intersection approximately one-half mile north of the project area.

Police

The Redmond Police Department provides police services in the City. The Police Department is located at 8701 160th Avenue NE, less than one mile north of the project area. The Department provides patrol services and traffic, parking, enforcement and crime prevention services throughout the city. The Department also participates in mutual aid agreements with adjacent jurisdictions.

Schools

Redmond is served by the Lake Washington School District, which has 48 schools and over 23,500 employees. The District includes K-12 schools, as well as alternative schools and programs. Redmond Elementary School, located at 16800 NE 80th Street, is near the project area.

Utilities

The City of Redmond provides water, sewer, and stormwater drainage services to the project area. Numerous water, sewer, and stormwater pipelines are located within streets in the project area. Puget Sound Energy provides electricity and

natural gas in the city. Electrical transmission lines are located along and beneath existing streets in the project area, and natural gas lines are also present. GTE Northwest and Viacom Cablevision provide telephone and cable services to the area and also have existing lines within streets located along proposed project alternative routes. The existing utilities in the project area are summarized in Table 3.30. In addition to these lines, there is also a large vault-type water quality facility south of Leary Way at 159th Place NE. Utilities in the project area are generally described below and are shown on Figures 3.19, 3.20, and 3.21.

Stormwater

162nd Avenue NE south of Leary Way is drained by a series of catch basins and 12" storm drain pipe, discharging to a closed contour on the west side of Bear Creek Parkway and the RTC development. Leary Way and the southerly portion of 159th Place NE in the project area are drained by a 15" and 12" storm drains respectively. These storm drains discharge into a detention pond and then directly into the Sammamish River. The northerly portion of 159th Place NE drains northwards to Redmond Way.

Potable Water

162nd Ave NE south of Leary Way is served by a 12" loop water main that in turn tees into a 12" water line on Leary Way. A 6" water distribution line runs along 159th Place NE north from Leary Way.

Sewer

162nd Avenue NE and Bear Creek Parkway are sewered by a 12" sewer pipe draining north to Leary Way. At this point the sewer line becomes a 15" line and drains to west connecting to a 30" trunk sewer. 159th Place NE is sewered by an 8" line draining to the north.

Table 3.30: Existing Utilities

Roadway	Water	Sewer	Storm	Large Overhead Electric	Telephone	Cable	Natural Gas
Bear Creek Parkway	6"	12"	12"				
Leary Way	6" and 12"	15"	12"*			Viacom trunk line	PSE high pressure main
159th Place NE	6"	8"	12"*				
162nd Ave NE	12"	15"	12"				
Redmond Way	4" and 8"	14" and 18"	12", 18", 30"	115 KV	GTE feeder route	Viacom trunk line	
Cleveland Street	4" and 6"	8" and 10"	12" and 24"		GTE feeder route		
161st Ave. NE	6"						

* = Utility present on part of the roadway within the project area

Blank indicates none in project area
Source: Redmond GIS Files and RCP

Environmental Impacts

Access for emergency services and school bus routes could be affected during construction of any of the build alternatives. However, these effects would be temporary and alternate routes would be available at all times. No long-term impacts to fire, police, or school bus services are expected. Utility impacts for each alternative are described below.

No Action Alternative

With the No Action Alternative, existing roads would not be disturbed and no public services or utilities would be affected.

Alternative 1

Existing utility lines in the project area could be affected by construction activities for Alternative 1.. The existing stormwater system under Bear Creek Parkway would remain intact. A new drainage collection and conveyance system consisting of buried storm drain pipes with oil/water separation and water quality wet pond would be constructed in accordance with Ecology requirements for enhanced treatment. Water would be discharged directly to the Sammamish River without detention. Conveyance piping along 159th Avenue will be evaluated during design, and enlarged if required.

No changes to the existing water or sewer systems are anticipated. Existing lines would remain in their current locations and no new lines would be added. The 12" water main running north on 162nd Avenue NE to Leary Way will remain in the dedicated right-of-way. No tree planting will be allowed with 5' of the water line and access to the water line will be maintained to allow for maintenance, if required.

Alternative 2

Alternative 2 would require minor modifications to the northerly drainage system on 162nd Avenue NE to accommodate the road realignment. Drainage north of Leary Way will be collected via a ditch conveyance system, and directed to an enhanced water quality treatment facility with oil/water separation. Stormwater would then be directed to the Sammamish River for discharge or discharged at the surface and disbursed, if feasible. The existing stormwater system under Bear Creek Parkway would remain intact.

A 12" waterline will be extended north from Leary Way along the extended Bear Creek Parkway. This line will then tee into the existing 6" waterline on 159th Place NE. Fire hydrants will be added along the extended Bear Creek Parkway at spacing to be determined by the Redmond Fire Department. Water meters will be installed for irrigation service along the right-of-way. No domestic or commercial water services are planned.

No changes to the existing sewer system are anticipated. Existing lines would remain in their current locations and no new lines would be added.

Figure 3.19 Stormwater Lines

This page left intentionally blank

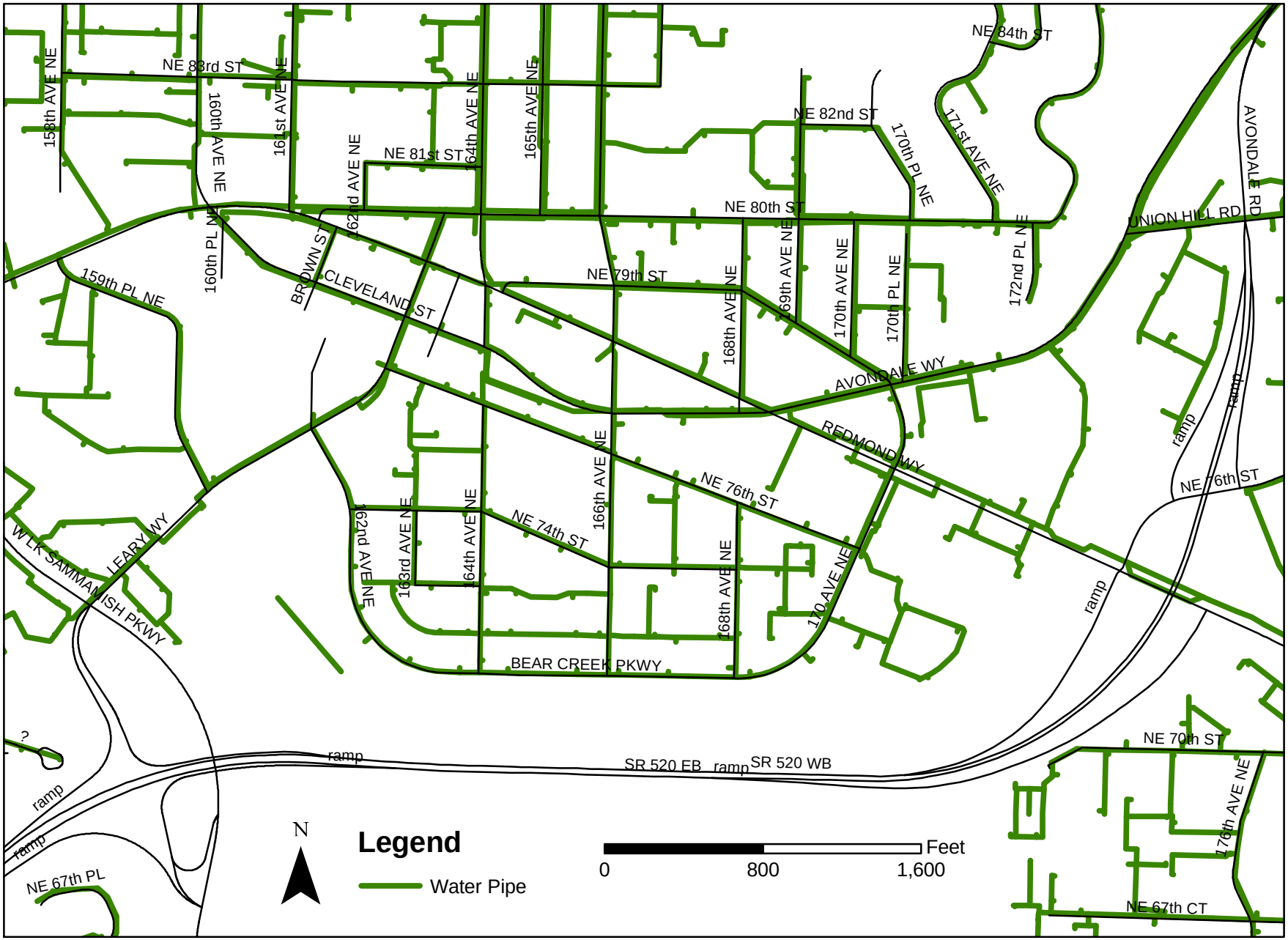

Figure 3.20 Water Lines

This page left intentionally blank

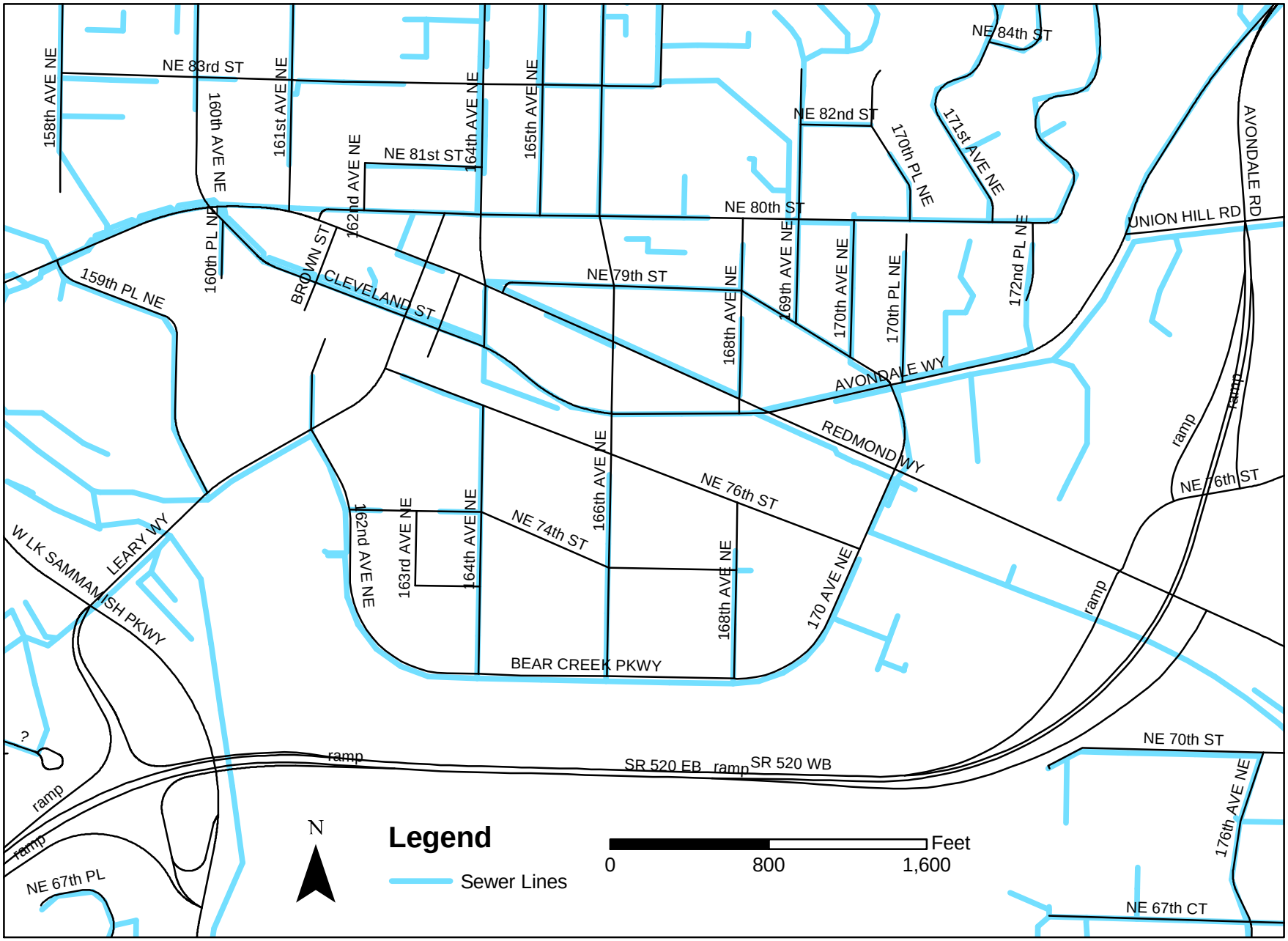

Figure 3.21 Sewer Lines

This page left intentionally blank

Alternative 3

Alternative 3 would have the same impacts to utilities as Alternative 2. Utilities on Cleveland Street would also be affected and short-term disruptions in service during construction may occur.

Alternative 4

The impacts of Alternative 4 would be the same as for Alternatives 2 and 3.

Mitigation Measures

The City would coordinate with utility and service providers in order to avoid or minimize potential disturbances to existing utilities in the project area.

Residents and businesses in the project area would be given advance notification of potential service or utility disruptions during construction periods.

Significant Unavoidable Adverse Impacts

No long-term significant adverse impacts are expected to result from proposed project activities.

This page left intentionally blank